CLAIMS:

1. A delivery system , comprising:

- syringe means having an outlet for delivering fluid materials;

- onboard dispensing control means onboard the syringe means for controlling the passage of the fluid materials through the outlet;

- first identification means operable for recording, emitting, carrying or associating first identity data to identify the dispensing means, or the material or article carried thereby; and

- permission control means operable to communicate with the onboard dispensing control means to establish a predetermined condition of the dispensing control means when a corresponding predetermined relationship is established between the first identity data and second identity data of an associated entity.

2. A system as defined in claim 1 wherein the associated entity is a dispensing recipient, a medical professional or clinician.

3. A system as defined in claim 2 wherein the dispensing recipient is a medical patient, an experimental subject and/or a candidate for a treatment or procedure.

4. A system as defined in claim 3 wherein the dispensing recipient is mammalian.

5. A system as defined in claim 4 wherein the dispensing target is a human being.

6. A system as defined in claim 1 wherein the fluid materials have beneficial properties to enhance

life, to promote health, to cure and/or treat a disease, condition or ailment, to monitor and/or indicate a bodily function or a combination thereof.

7. A system as defined in claim 6 wherein the fluid materials are useful for IV therapy, implantation, stem cell therapy, oncology therapy, blood transfusion and/or organ transplantation.

8. A system as defined in claim 1 wherein the onboard dispensing control means includes an onboard access means for controlling access to the outlet.

9. A system as defined in claim 8 wherein the onboard access means includes an onboard controlled valve member, or an onboard controlled outlet blockage member or both.

10. A system as defined in claim 9 wherein the onboard valve member or onboard outlet blockage member is normally closed.

11. A system as defined in claim 10 wherein the onboard valve member is a variable aperture valve member, a proportional valve member or a combination thereof.

12. A system as defined in claim 11 wherein the onboard valve member is a pulse width modulated on-off valve.

13. A system as defined in claim 9 wherein the syringe means includes a plunger portion positioned in a barrel portion, the onboard dispensing control means including lock means for locking the position of the plunger portion.

14. A system as defined in claim 13, wherein the onboard dispensing control means includes an onboard valve means located in the barrel portion or downstream thereof.

15. A system as defined in claim 13 wherein the onboard dispensing control means includes an onboard blockage member located in the barrel portion or downstream thereof.

16. A system as defined in claim 11 wherein the second identity data identifies the recipient.

17. A system as defined in claim 16 wherein the second identity data is embedded in, carried by or emitted by an article carried externally or internally by the recipient.

18. A system as defined in claim 17 wherein the article includes a band or ring to be worn on a leg, arm or neck of the recipient.

19. A system as defined in claim 18 wherein the article includes an RFID tag or chip carrying the second identity data..

20. A delivery system , comprising:

- dispensing means having an outlet for delivering one or more materials or one or more articles;

- dispensing control means for controlling the passage of the material or article through the outlet;

- first identification means operable for recording, emitting, carrying or associating first identity data to identify the dispensing means, or the material or article carried thereby; and

- permission control means operable to establish a predetermined condition of the dispensing control means when a corresponding predetermined relationship is established between the first identity data and second identity data of an associated entity.

21. A system as defined in claim 20 wherein the associated entity is a dispensing recipient, a medical

professional or clinician.

22. A system as defined in claim 21 wherein the dispensing recipient is a medical patient, an experimental subject and/or a candidate for a treatment or procedure.

23. A system as defined in claim 22 wherein the dispensing recipient is mammalian.

24. A system as defined in claim 23 wherein the dispensing target is a human being.

25. A system as defined in claim 20 wherein the material or article has beneficial properties to enhance life, to promote health, to cure and/or treat a disease, condition or ailment, to monitor and/or indicate a bodily function or a combination thereof.

26. A system as defined in claim 25 wherein the material or article is useful for IV therapy, implantation, stem cell therapy, oncology therapy, blood transfusion and/or organ transplantation.

27. A system as defined in claim 25 wherein the dispensing means includes a syringe, IV bottle, powder and/or atomized fluid and/or gas inhalant dispenser, implant delivery dispenser, ventilator, syringe pump, intubation tube, or a gastrointestinal feeding tube or a plurality and/or a combination thereof.

28. A system as defined in claim 20 wherein the dispensing control means includes an access means for controlling access to the outlet.

29. A system as defined in claim 28 wherein the access means includes a controlled valve member, or a controlled outlet blockage member or both.

30. A system as defined in claim 29 wherein the valve member or outlet blockage member is normally

closed.

31. A system as defined in claim 30 wherein the valve member is a variable aperture valve member, a proportional valve member or a combination thereof.

32. A system as defined in claim 29 wherein the valve member is a pulse width modulated on-off valve.

33. A system as defined in claim 29 wherein the blockage member is a lockable cap member.

34. A system as defined in claim 29 wherein the dispenser means includes a syringe with a plunger portion positioned in a barrel portion, wherein the dispensing control means includes lock means for locking the position of the plunger portion.

35. A system as defined in claim 34, wherein the dispensing control means includes a valve means located in the barrel portion or downstream thereof.

36. A system as defined in claim 35 wherein the dispensing control means includes a blockage member located in the barrel portion or downstream thereof.

37. A system as defined in claim 29 wherein the dispenser includes an output channel providing a delivery site, the valve means and/or blockage member being located at the delivery site.

38. A system as defined in claim 22 wherein the second identity data identifies the recipient.

39. A system as defined in claim 38 wherein the second identity data is embedded in, carried by or emitted by an article carried externally or internally by the recipient.

40. A system as defined in claim 39 wherein the article includes a band or ring to be worn on a leg, arm

or neck of the recipient.

41. A system as defined in claim 40 wherein the article includes an implantable ID chip.

42. A system as defined in claim 20 wherein the permission control means includes a key portion associated with the second identity data.

43. A system as defined in claim 42 wherein the key portion is located on an article carried externally or internally by the recipient.

44. A system as defined in claim 42 wherein the key portion is operable to engage a complementary key receiving portion to establish the predetermined condition.

45. A system as defined in claim 44 wherein the key receiving portion is located on the dispensing means.

46. A system as defined in claim 45 wherein the dispensing means includes a syringe, IV bottle, powder and/or atomized fluid and/or gas inhalant dispenser, implant delivery dispenser, ventilator, syringe pump, intubation tube, gastrointestinal feeding tube or a plurality and/or combination thereof.

47. A system as defined in claim 46 wherein the article is a wrist band the dispensing means is a syringe.

48. A system as defined in claim 46 wherein the key-receiving portion includes a key receiving-passage.

49. A system as defined in claim 47 wherein the permission means is operable to expose the key portion to the key-receiving portion.

50. A system as defined in claim 49 wherein the key portion is movable between a concealed position and the exposed position.

51. A system as defined in claim 49 wherein the key portion is stationary relative to the article and the permission means further comprises a key shroud which is operable between a key-concealing condition and a key-revealing condition.

52. A system as defined in claim 20 wherein the first identification means includes a biometric sensor, an optical character reader, a bar code reader, a magnetic strip reader, or a combination thereof.

53. A system as defined in claim 20 wherein the first identification means includes a signal emitter and/or receiver to emit and/or receive signals in the visible or invisible frequency spectrums.

54. A material dispensing system, comprising:

- a material dispenser having material container portion and a material delivery outlet channel portion;

- valve means for controlling access to the delivery outlet channel portion;

- first identification means operable for recording, emitting, carrying or associating valve identity data to identify the valve means; and

- valve control means operable to establish a predetermined condition of the valve means when a corresponding predetermined relationship is established between the valve identity data and identity data of an associated article in a vicinity of the material dispenser.

55. A system as defined in claim 54, wherein the material dispenser is arranged for delivery of materials

in the treatment of a patient.

56. A system as defined in claim 55 wherein the materials are fluids.

57. A system as defined in claim 56 wherein the material container portion includes a syringe, a vial, a catheter and/or an IV bag.

58. A system as defined in claim 57 wherein the delivery outlet channel portion is downstream of a plunger-containing chamber portion, the valve means being located in the delivery outlet channel portion.

59. A system as defined in claim 57 wherein the delivery outlet channel portion is downstream of a plunger-containing chamber portion, the valve means further comprising a valve housing attachable with and/or separable from the delivery outlet channel portion.

60. A system as defined in claim 57 wherein the associated article is attachable to or wearable by a patient to receive the fluid materials.

61. A system as defined in claim 60 wherein the associated article is an identity tag attachable to or an article worn by the patient.

62. A system as defined in claim 54, further comprising second identification means operable for recording, emitting, carrying or associating identity data to identify the associated article.

63. A system as defined in claim 62 wherein the first or second identification means, or both, are arranged to retain the valve identity data or the associated article identity data in electronic, graphical, mechanical or nuclear form.

64. A system as defined in claim 63 wherein the first or second identification means, or both, are operable to convey the valve identity data or the associated article identity data on a carrier wave.

65. A system as defined in claim 64 wherein the carrier wave includes radio frequency waves, microwaves or waves or signals of other frequencies or frequency ranges.

66. A system as defined in claim 65 wherein the valve identity or the associated article identity data is resident on the carrier wave by frequency modulation, amplitude modulation, wave superposition or a combination thereof.

67. A system as defined in claim 66, further comprising comparison means for comparing the valve identity data with the associated article identity data.

68. A system as defined in claim 67 wherein the comparison means is operable to receive and decode an RF ID signal from the valve, the associated article or both.

69. A system as defined in claim 67, wherein the containing means includes a syringe, the comparison means is integrally formed with the syringe.

70. A system as defined in claim 68 wherein the syringe has a valve portion downstream of and separable from a chamber portion, the comparison means being located in the valve portion.

71. A system as defined in claim 68 wherein the comparison means is resident in an intermediate controller module which is operable within signal receiving range of both the valve and the associated article.

72. A system as defined in claim 54 wherein the valve means includes a valve element powered by a power supply portion.

73. A system as defined in claim 72 wherein the power supply portion includes a power source residing in the power supply portion, a conductive path to an external power source, or an inductive power generating module which is responsive to externally applied radiation, or a combination thereof.

74. A system as defined in claim 73 wherein the radiation is of the microwave or radio wave frequency ranges.

75. A system as defined in claim 74 wherein the comparison means is operable to open the delivery outlet channel portion when there is a match between the valve identity data and the associated article data.

76. A system as defined in claim 75 wherein the comparison means is operable to close the valve means to block access to the delivery outlet portion when there is a mismatch between the valve and the associated article identity data.

77. A system as defined in claim 75 wherein the material dispenser includes a syringe and the power supply portion is integrally formed therewith.

78. A system as defined in claim 63 wherein the first and second identification means includes complementary first and second key formations located on , in or near the valve means and the associated article respectively.

79. A system as defined in claim 78 wherein the first key formation is located on the material dispenser and the second key formation is located on the associated article so that the material dispenser and associated article may positioned so that the first and second key formations be brought into complementary engagement with one another to establish the predetermined relationship.

AMENDED CLAIMS

[Received by the International Bureau on 01 October 2004 (01.1004): original claims 1-79 replaced by amended claims claims 1-48 (7 pages)]

CLAIMS:

1. A delivery system, comprising:

dispensing means having an outlet for delivering one or more materials;

dispensing control means for controlling the passage of the material through the outlet;

first identification means having first identity data associated with the dispensing means or the material carried thereby, the first identification operable in a data recording mode or a data emitting mode;

second identification means having second identity data associated with an entity, the entity being associated with the dispensing means, the second identification means operable in a data recording mode or a data emitting mode; and

permission control means operable to establish a predetermined condition of the dispensing control means when a corresponding predetermined relationship is established between the first identity data and the second identity data.

2. A system as defined in claim 1 wherein the entity is a dispensing recipient, a medical professional or clinician.

3. A system as defined in claim 2 wherein the entity is a dispensing recipient and the second identity data is embedded in, carried by or emitted by an article carried externally or internally by the recipient.

4. A system as defined in claim 1, claim 2 or claim 3 wherein the dispensing control means includes an access means for controlling access to the outlet.

5. A system as defined in claim 4 wherein the access means includes valve means, or outlet blockage member or both.

6. A system as defined in claim 5 wherein the valve means or outlet blockage member is operable between an open position and a closed position, and is normally closed.

7. A system as defined in claim 5 or claim 6 wherein the access means is a valve means comprising a variable aperture valve member, a controlled valve member, a proportional valve member or a combination thereof.

8. A system as defined in any of claims 4 to 7 wherein the valve means is a pulse width modulated on-off valve.

9. A system as defined in claim 5 wherein the access means includes an outlet blockage member comprising a lockable cap member.

10. A system as defined in claim 1 wherein the first or second identification means, or both, are arranged to retain the first identity data or the second identity data in electronic, graphical, mechanical or nuclear form.

11. A system as defined in claim 10 wherein the first or second identification means, or both, are operable to convey the first identity data or the second identity data on a carrier wave.

12. A system as defined in claim 11 wherein the carrier wave includes radio frequency waves, microwaves or waves or signals of other frequencies or frequency ranges.

13. A system as defined in claim 11 or claim 12 wherein the first identity or the second identity data is resident on the carrier wave by frequency modulation, amplitude modulation, wave superposition or a combination thereof.

14. A system as defined in any of the preceding claims wherein the permission control means includes comparison means for comparing the first identity data with the second identity data.

15. A system as defined in claim 14 wherein the comparison means is operable to receive and decode an RFID signal from the dispensing means, the entity or both.

16. A system as defined any of the preceding claims wherein the first identification means includes a biometric sensor, an optical character reader, a magnetic strip reader, an RFID reader or a combination thereof.

17. A system as defined in any of claims 1 to15 wherein the first identification means includes a signal emitter and/or receiver to emit and/or receive signals in the visible or invisible frequency spectrums.

18. A system as defined in any of claims 3 to 17 wherein the article includes a band or ring to be worn on a leg, arm or neck of the recipient.

19. A system as defined in claim 18 wherein the article includes an identification chip such as an RFID tag associated with the second identity data.

20. A system as defined in any of claims 4 to 19 wherein the access means is a valve means and the first identification means includes valve identity data to identify the valve means; and the second identification means includes article identity data to identify an article associated with the valve means; the comparison means being operable to open the outlet when there is a match between the valve identity data and the article data.

21. A system as defined in claim 20 wherein the comparison means is operable to close the valve means to block access to the outlet when there is a mismatch between the valve identity data and the article identity data.

22. A system as defined in claim 20 or claim 21 wherein the comparison means is resident in an intermediate controller module which is operable within signal receiving range of the valve means, the onboard blockage member and the article.

23. A system as defined in claim 22 wherein the comparison means is integrally formed within the dispensing means.

24. A system as defined in any of claims 5 to 23 wherein the access means is a valve means which includes a valve element powered by a power supply portion.

25. A system as defined in claim 24 wherein the power supply portion includes a power source residing in the power supply portion, a conductive path to an external power source, or an inductive power generating module which is responsive to externally applied radiation, or a combination thereof.

26. A system as defined in claim 25 wherein the power supply portion is integrally formed with the dispensing means.

27. A system as defined in claim 25 or claim 26 wherein the power supply portion is an inductive power generating module, and the externally applied radiation is within the microwave or radio wave frequency ranges.

28. A system as defined in any of claims 1 to 8 wherein the permission control means includes a key portion associated with the second identity data.

29. A system as defined in claim 28 wherein the key portion is located on an article carried externally or internally by the entity.

30. A system as defined in claim 28 or claim 29 wherein the key portion is operable to engage a complementary key receiving portion to establish the predetermined condition.

31. A system as defined in claim 30 wherein the key receiving portion is located on the dispensing means.

32. A system as defined in claim 30 or claim 31 wherein the key-receiving portion includes a key receiving-passage.

33. A system as defined in any of claims 28 to 32 wherein the permission means is operable to expose the key portion to the key-receiving portion.

34. A system as defined in claim 33 wherein the key portion is movable between a concealed position and an exposed position.

35. A system as defined in any of claims 28 to 34 wherein the key portion is stationary relative to the article and the permission means further comprises a key shroud which is operable between a key-concealing condition and a key-revealing condition.

36. A system as defined in any of claims 3 to 35 wherein the first and second identification means includes complementary first and second key formations located on, in or near the valve means and the associated article respectively.

37. A system as defined in claim 36 wherein the first key formation is located on the dispensing means and the second key formation is located on the associated article so that the dispensing means and associated article may positioned so that the first and second

key formations be brought into complementary engagement with one another to establish the predetermined relationship.

38. A system as defined in any of the preceding claims wherein the dispensing means includes syringe means, IV bottle, powder and/or atomized fluid and/or gas inhalant dispenser, implant delivery dispenser, ventilator, syringe pump, intubation tube, or a gastrointestinal feeding tube or a plurality and/or a combination thereof.

39. A system as defined in claim 38 wherein the dispensing means is a syringe having a barrel portion, a chamber portion and plunger portion, the plunger portion positioned in the barrel portion, an onboard dispensing control means including lock means for locking the position of the plunger portion.

40. A system as defined in claim 39 wherein the syringe has a valve portion downstream of and separable from the chamber portion, the permission control means including a comparison means for comparing the first identity data with the second identity data, the comparison means being located in the valve portion.

41. A system as defined in claim 39 or claim 40 wherein the onboard dispensing control means includes an onboard valve means located in the barrel portion or downstream thereof.

42. A system as defined in claim 39, claim 40 or claim 41 wherein the onboard dispensing control means includes an onboard blockage member located in the barrel portion or downstream thereof.

43. A system as defined in claim 39 wherein the outlet is downstream of a plunger-containing chamber portion, the valve means further comprising a valve housing attachable with and/or separable from the outlet.

44. A system as defined in any of the preceding claims wherein the entity is dispensing recipient selected from a medical patient, an experimental subject and/or a candidate for a treatment or procedure.

45. A system as defined in claim 44 wherein the dispensing recipient is mammalian.

46. A system as defined in claim 45 wherein the dispensing recipient is a human being.

47. A system as defined in any of the preceding claims wherein the material has beneficial properties to enhance life, to promote health, to cure and/or treat a disease, condition or ailment, to monitor and/or indicate a bodily function or a combination thereof.

48. A system as defined in any of the preceding claims wherein the material is useful for IV therapy, implantation, stem cell therapy, oncology therapy, blood transfusion and/or organ transplantation.